Hydraulic Anchor Load Cells HLC-6000 Series

Hydraulic Anchor Load Cells consist of a sensitive pressure pad. The void inside the cell is filled with de-aired fluid. When load is applied to the cell the pressure of the inside liquid changes. The changes in pressure correspond directly to the load applied.









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Overview



The Geosense® HLC-6000 series Hydraulic Anchor Load Cells consist of a sensitive pressure pad formed by joining two stiff steel discs at their periphery. The void inside the cell is filled with de-aired fluid. When load is applied to the cell the pressure of the inside liquid changes. The changes in pressure correspond directly to the load applied.

Manufactured with a centre hole to accommodate anchors, rock bolts and tendons.

The pressure in the loads cell is measured either by a manometer or a vibrating wire transducer (VWDT-5000) which are available in the following models:

HLC-6000 - Manometer (scale in kN) for pressure indication

HLC-6500 - Vibrating wire transducer

Model HLC-6500 can be read with a VW-2106 direct readout or connected into a GeoLogger data acquisition system.

Mounting surfaces should be flat and parallel for optimum performance and the use of very stiff abutment plates and load distribution plates is recommended.

The abutment plate (provided locally) is normally made to suit specific site requirements and the load distribution plate (supplied by Geosense) should be inserted between the load cell and the anchor head.



APPLICATIONS

Measurement of load acting on:
Ground anchors
Rock Bolts
Tie-backs
Struts
Arch Supports
Props

FEATURES

Robust stainless steel construction Load distribution plates available Manual or VW transducer readout Proven long-term accuracy Accommodates eccentric loading Data logger compatible

Available with plug connector or cable



Specifications

Description		HLC-6000	HLC-6500
Over range capacity		20%FS	20% FS
Resolution		0.5% FS	0.025%FS
Accuracy		manometer class ±1 % FS	± 1 % FS
emperature range		-30°C to + 85°C	-30°C to + 85°C
Naterial		Stainless Steel	Stainless Steel
Output signal		Manual	Frequency
OAD CELLS & LOAD	DISTRIBUTI	ON PLATE DIMENSIONS	
Capacity (kN)	ID (mm)	OD (mm)	Load cell height (mm)
50	40	134	30
00	71	170	30
50	92	206	30
000	110	236	30
250	130	265	30
500	165	302	30
2000	190	344	30
200	210	405	30
NCILLARY EQUIPM	ENT		
lanual readouts			
ata acquisition system	าร		
ad distribution plate	S		
entraliser bushes			
able Type 900 - VW	Sensor with	Foil Screen & Drain Wire	
able end protectior	۱		
ly lead			
ump lead			
RDERING INFORM	ATION		
ipacity			
able length & protecti	on		
eadout			
oad distribution plate			





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